



Office of the
Dane County Medical Examiner

Dr. Vincent Tranchida,
Chief Medical Examiner



ME Case #: Dane 16-5205
Name of Decedent: Shannon J. Payne

Autopsy Performed By: Vincent Tranchida, M.D.
Date of Autopsy: January 01, 2017

FINAL DIAGNOSES

- I. ANOXIC-ISCHEMIC ENCEPHALOPATHY COMPLICATING ACUTE ACRYLFENTANYL INTOXICATION, WITH:
 - a. WITNESSED SUDDEN UNRESPONSIVENESS.
 - b. ANOXIC-ISCHEMIC ENCEPHALOPATHY, WITH:
 - i. CEREBRAL EDEMA (1630 GRAMS).
 - ii. FLATTENING OF CEREBRAL GYRI.
 - iii. NARROWING OF CEREBRAL SULCI.
 - iv. NARROWING OF VENTRICULAR SYSTEM.
 - v. BILATERAL, SYMMETRICAL TRANSTENTORIAL HERNIATION, WITH UNCAL NOTCHING (0.6 CM).
 - vi. BILATERAL, SYMMETRICAL CENTRAL HERNIATION, WITH:
 1. CEREBELLAR TONSILLAR NOTCHING (1.5 CM).
 2. CEREBELLAR TONSILLAR SOFTENING AND NECROSIS.
 - c. PULMONARY CONGESTION AND EDEMA (1760 GRAMS), WITH:
 - i. BILATERAL CLEAR SEROUS EFFUSIONS (15 ML COMBINED).
 - ii. FROTHY FLUID EXPRESSED FROM CUT SURFACES.
 - d. COLONIC CONSTIPATION.
 - e. HOSPITAL ADMISSION SERUM POSITIVE FOR ACRYLFENTANYL (0.18 NG/ML).
 - f. SEE TOXICOLOGY REPORT.
 - g. SEE HISTOLOGY REPORT.
- II. HYPERTENSIVE CARDIOVASCULAR DISEASE, WITH:
 - a. CARDIAC HYPERTROPHY (540 GRAMS).
 - b. LEFT VENTRICULAR CONCENTRIC HYPERTROPHY (1.6 CM).
- III. DIABETES MELLITUS (ANAMNESTIC).
- IV. CHRONIC SUBSTANCE ABUSE (ANAMNESTIC), WITH:
 - a. HOSPITAL URINE DRUG SCREEN REPORTEDLY POSITIVE FOR BENZODIAZEPINES AND OPIATES (ANAMNESTIC).
 - b. ANTRAL GASTRITIS.
 - c. CHRONIC PERIPORTAL LYMPHADENOPATHY.
- V. OBESITY (6'2", 299.0 LBS), WITH:
 - a. BODY MASS INDEX (BMI) OF 38.4.
 - b. 3-1/8" ABDOMINAL PANNUS.
 - c. HEPATOSTEATOSIS.
 - d. SEE HISTOLOGY.
- VI. EARLY EMPHYSEMATOUS CHANGES, WITH:

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Vincent Tranchida, M.D.

EXHIBIT



- a. SINGLE APICAL EMPHYSEMATOUS PLEURAL BLEB ON UPPER LOBE OF RIGHT LUNG.
- b. MODERATE SUBPLEURAL AND INTERSTITIAL ANTHRACOTIC PIGMENT DEPOSITION.

VII. PALMAR PITTED KERATOLYSIS.

VIII. STATUS-POST RESUSCITATIVE EFFORT.

CAUSE OF DEATH: Anoxic-ischemic encephalopathy complicating acute acrylfentanyl intoxication.

MANNER OF DEATH: Accident (Substance abuse).

I hereby certify that I, Vincent Tranchida, M.D., Chief Medical Examiner of Dane, Rock, Brown, Door and Oconto Counties of Wisconsin, have performed an autopsy on the body of Shannon J. Payne on January 01, 2017 in the Dane County Mortuary of the city of Madison, Wisconsin.

This autopsy was performed in the presence of Dane County Sheriff's Office Detective Brian Frisch, Dane County Sheriff's Office Deputy James Plenty, Rock County Sheriff's Office Detective Rich Kainholz, Rock County Sheriff's Office Detective Darrell Knutson, and Dane County Medical Examiner's Office Morgue Technician Amy Brinkman.

The body was received in an intact, sealed, labeled white body bag.

"Sealed 12/31/16 @ 1352 DM" is written in black marker on the outside of the bag.

The red security seal ("0005646") was cut at 08:45 am to begin the examination.

EXTERNAL EXAM:

An unattached body tag is received in the bag with the body, reading "Payne, Shannon HAR: 327490389 CSN: 654528206 DOB: 6/25/1979 (37 yrs) M Pct? No MRN: 95860906 Adm Date: 12/27/2016."

The body is of a well-developed, well-nourished, large-framed (obese), 6', 02", 299 lb (Body Mass Index [BMI] = 38.4) Black man, whose appearance is consistent with the given age of 37 years.

The curly, black scalp hair has trace grey and measures up to 3/4". A 1/4" mustache and 5/8" beard are present.

The nose and facial bones are palpably intact.

The ears are normally formed and atraumatic. Each earlobe is pierced twice. Bilateral earlobe creases are present.

The irides are brown. The conjunctivae are without jaundice, hemorrhage, petechiae or edema.

The oral cavity has natural teeth in good repair and the oral mucosa is atraumatic.

The skin of the head, neck and upper aspect of the chest is plump.

The torso is unremarkable. White powder (Comment: Appearance of the powder is consistent with deodorant powder) is present in each axilla.

Dermal striae are present on the anterior of each axilla, both sides of the abdomen, and both sides of the lower back.

The external genitalia are atraumatic and of a normal, circumcised adult male. Both testes are descended.

The anus is atraumatic.

The fingernails are short, intact and unpolished.

There is superficial pitting of the dermal surface of both hands, predominantly involving the palmar digital creases and distal palmar creases of the right hand and the distal palmar crease and the thenar crease of the left hand. Individual dermal pits measure up to 0.7 cm on the right and 0.3 cm on the left (Comment: The appearance of these pits is consistent with pitting keratolysis).

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- An endotracheal tube with a soft endotracheal tube collar. Subsequent internal examination reveals the tip of the tube in the proximal third of the trachea
- A gastoesophageal tube. Subsequent internal examination reveals the tip of the tube in the body of the stomach
- A bandaged, 1/8" puncture in the midline of the upper aspect of the abdomen, just below the xiphoid process. This puncture is bandaged with a tan "Band Aid"-style bandage. Subsequent internal examination reveals two, 0.1 and 0.2 cm punctures of the anterior surface of the left lobe of the liver (Comment: Appearances of the punctures are consistent with sites of recent needle liver biopsies). There is slight associated hemorrhage of the tissues of the abdominal wall and minimal associated hepatic capsule hemorrhage. 30 ml of slightly hemorrhagic fluid are present in the peritoneal cavity in association with these punctures (see "Body Cavities" also below).
- A puncture with surrounding purpura on the right lower quadrant of the abdomen. This puncture is bandaged with a tan "Band Aid"-style bandage.
- An indwelling urinary catheter with a wire lead
- A five lumen intravascular catheter in the right side of the groin
- A crusted puncture on the outer aspect of the left antecubital fossa
- A recent puncture with surrounding purpura on the inner aspect of the left antecubital fossa
- An intravascular catheter in the dorsal aspect of the left forearm, dated "12-28-16 Time: Gauge: 20 Name: G. Ennis"
- An intravascular catheter in the volar aspect of the left wrist
- A recent puncture on the pad of the left thumb
- A recent puncture on the volar aspect of the right wrist
- A white hospital identification band on the right wrist reading "Payne, Shannon HAR: 327490389 CSN: 654528206 DOB: 6/25/1979 (37 yrs) M MRN: 95860906 "
- Five recent punctures on the pad of the right thumb
- Six recent punctures on the pad of the right middle finger
- Five recent punctures on the pad of the right ring finger
- Five recent punctures on the pad of the right little finger
- Dried adhesive residue on the pad of the right index finger (Comment: Appearance of the adhesive residue is suggestive of possible prior pulse oximeter placement).

INJURIES (EXTERNAL AND INTERNAL):

There are minor blunt force trauma injuries of the left upper extremity and left lower extremity. These injuries are described with reference to the standard anatomical planes with the body examined in the horizontal position. No order or sequence is implied.

LEFT UPPER EXTREMITY:

Abrasions: There is a 1/16" crusted, punctate abrasion on the outer aspect of the distal left arm

LEFT LOWER EXTREMITY:

Abrasions: The following abrasions are present:

- A 3/4" x 1/8" crusted, interrupted, vertical linear abrasion on the anterior aspect of the proximal left thigh
- A 2-1/2" x 1-1/4" crusted, interrupted, irregular abrasion on the inner aspect of the left thigh

Subsequent internal examination of the torso reveals minimally hemorrhagic fractures as follows:

- The sternum at the level of the third intercostal space
- The anterior aspects of left ribs 2-3
- The anterior aspects of right ribs 2-4

Dermal striae are present on the anterior aspects of each proximal thigh and the inner aspects of both knees.

The toenails are short, intact and unpolished.

A toe tag on the left great toe reads "Payne, Shannon HAR: 327490389 CSN: 654528206 DOB: 6/25/1979 (37 yrs) M Pvt No MRN: 95860906 Adm Date: 12/27/2016."

SCARS:

The following well-healed scars are present:

1. A 1" horizontal linear scar on the midline of the upper aspect of the abdomen, just above the umbilicus
2. Scattered follicular scars on the superior aspects of both shoulders and the upper aspects of both sides of the back. Individual scars range in size from 1/16" to 3/16".
3. A 1-1/2" horizontal linear scar on the left antecubital fossa
4. A 2-1/2" x 3/16" horizontal linear scar on the anterior aspect of the left knee
5. A 1/4" oblique linear scar on the outer aspect of the left knee.

TATTOOS:

The following tattoos are present:

1. A 4-1/4" x 4" monochromatic amateur tattoo on the left side of the chest (a design of a dog's head, possibly a pitbull)
2. A 3" x 1-1/2" monochromatic amateur tattoo on the right side of the chest (a design of the word "Dog")
3. A 4-1/8" x 3" monochromatic amateur tattoo on the outer aspect of the middle of the left arm (a design of the initials "SJP")
4. A 6-1/4" x 4" monochromatic amateur tattoo on the dorsal aspect of the left forearm (a design of an angel)
5. A 5-3/4" x 3-1/2" monochromatic amateur tattoo on the outer aspect of the right arm (a design of a cross and the name "Jesus")
6. A 5-1/2" x 4-1/2" monochromatic amateur tattoo on the dorsal aspect of the right forearm (a design of a pair of praying hands with the name "Pam")
7. A 5-3/4" x 1-1/4" monochromatic amateur tattoo on the volar aspect of the right forearm (a design of the name "Pam Steele")

POSTMORTEM CHANGES:

The corneas are slightly cloudy. There is moderate, symmetrical rigor mortis of the upper and lower extremities, neck, and jaw. Lividity is unfixed, purple and posteriorly distributed. The body is cold (refrigerated).

CLOTHING/PERSONAL PROPERTY:

The body is received clad in a white hospital gown.

THERAPEUTIC PROCEDURES:

The following therapeutic procedures are present:

(Comment: The appearance and distribution of these fractures is suggestive of perimortem resuscitative artifact (e.g. chest compressions).)

These injuries, having been described, will not be repeated.

INTERNAL EXAMINATION:

HEAD:

The scalp has no contusion. The skull has no fracture. There is no epidural, subdural or subarachnoid hemorrhage. The brain weighs 1,630 and is diffusely edematous, with dusky pink discoloration of the cerebral cortex. There is flattening of the cerebral gyri and narrowing of the cerebral sulci. There is bilateral uncal notching, measuring up to 0.6 cm. There is bilateral cerebellar tonsillar notching (up to 1.5 cm) with softening and necrosis of the cerebellar tonsils. The cranial nerves and cerebral vessels are unremarkable. The leptomeninges are thin, clear and delicate. The brain is symmetrical with normal distributions of white and grey matter and deep nuclei. There is slight narrowing of the ventricular system.

NECK:

The cervical vertebrae, hyoid bone, tracheal and laryngeal cartilages and paratracheal soft tissues are without trauma. The upper airway is not obstructed. The tongue is unremarkable.

BODY CAVITIES:

10 ml of clear, serous fluid are present in the left pleural cavity and 5 ml are present in the right. 10 ml of clear, straw-colored fluid are present in the in the pericardial sac. 30 ml of slightly hemorrhagic ascites fluid are present in the peritoneal cavity. The organs are in their normal situs without fibrous adhesions. The abdominal parietes is 3-1/8" thick.

CARDIOVASCULAR SYSTEM:

The heart weighs 540 grams and has a normal distribution of right predominant, widely patent coronary arteries.

The myocardium is uniformly dark red-brown, without gross pallor, hemorrhage, or fibrosis. The left ventricle and interventricular septum are each 1.6 cm thick. The right ventricle is 0.5 cm thick.

The endocardial surfaces and four cardiac valves are unremarkable.

The aorta is with slight atherosclerosis.

The venae cavae and pulmonary arteries are without thromboemboli or thrombi.

RESPIRATORY SYSTEM:

The right lung weighs 920 grams and the left lung weighs 840 grams. The purple parenchyma is congested and edematous. There is a single 2.2 x 1.1 x 1 cm apical emphysematous bleb on the apical aspect of the upper lobe of the right lung. There is moderate subpleural and interstitial anthracotic pigment deposition. Sectioning through the lung reveals frothy, serosanguinous fluid expressed from cut surfaces. There are no focal areas of consolidation or masses. The bronchial distribution and vasculature are unremarkable. The

bronchi are unremarkable.

LIVER, GALLBLADDER, AND PANCREAS:

The liver weighs 3,000 grams and has a smooth capsule with soft, slightly slippery, light brown (*Comment: Steatotic*) parenchyma without nodular texture or masses.

The decedent is status-post remote cholecystectomy.

The pancreas is without hemorrhage or mineralization.

HEMIC AND LYMPHATIC SYSTEM:

The spleen weighs 530 grams, is firm, and has a dark purple, intact capsule and dark parenchyma with moderately prominent white pulp.

There is slight periportal enlarged lymphadenopathy, with individual lymph nodes measuring in size up to $3.3 \times 2 \times 1.1$ cm. Sectioning through the lymph nodes reveals homogeneous tan tissue without masses or areas of hemorrhage or necrosis.

GENITOURINARY SYSTEM:

The right kidney weighs 230 grams and the left kidney weighs 220 grams. Each kidney has a smooth, red-brown surface and an unremarkable architecture and vasculature.

The ureters maintain uniform caliber into an unremarkable bladder with less than 5 ml of slightly cloudy, yellow urine.

The prostate is not enlarged. The testes are unremarkable.

ENDOCRINE SYSTEM:

The pituitary, thyroid, and adrenal glands are normal color, size, and consistency.

DIGESTIVE SYSTEM:

The esophagus and gastoesophageal junction are unremarkable.

The stomach has slight antral-gastritis and contains approximately 4 ml of watery, light brown fluid without recognizable fragments of pills, tablets or solid food.

The stomach, small intestine, appendix and large intestine are unremarkable. The colonic contents are brown and soft, except in the distal colon where there are constipated boluses of firm stool.

MUSCULOSKELETAL SYSTEM:

Except where previously described, the sternum, vertebrae, clavicles, ribs and pelvis are without fracture.

The musculature is normally distributed and unremarkable.

A posterior soft tissue dissection is negative for trauma.

HISTOLOGY:

BRAIN (x 1, 1A): Enlargement of perivascular and perineuronal spaces and vacuolization of the neuropil. Neuronal gliosis, with eosinophilic neurons with pyknotic nuclei. Features consistent with anoxic-ischemic encephalopathy with cerebral edema. Single leptomeningeal vessel with perivascular golden-brown pigment-laden macrophages.

HBART (x 3, 1G): Focal microscopic focus of interstitial myocardial hemorrhage without associated inflammatory response. Associated myocytes unremarkable, with viable nuclei and without contraction bands, myocytolysis, or other evidence of ischemic injury (Comment: May represent sectioning artifact). Vascular congestion.

LUNGS (x 5, 1B & D): Multiple, scattered aggregates (predominantly subpleural and perivascular) of anthracotic pigment-laden macrophages. Single giant-cell granuloma in section of right lung (1D). Marked congestion, with extravasation of intact erythrocytes into alveolar air spaces. Areas of intra-alveolar eosinophilic, acellular fluid, consistent with pulmonary edema. Softered, intrabronchial and intra-alveolar desquamated respiratory epithelium and macrophages. No polarizable foreign material present.

LIVER (x 1, 1E): Congestion. Marked hepatosteatosis.

KIDNEYS (x 2, 1E): Congestion. Otherwise, no significant histologic abnormality.

Representative sections of major organs are retained in formalin.

TOXICOLOGY:

Submitted for toxicologic analysis at Axis Toxicology Laboratories were samples of hospital admission blood, hospital admission serum, hospital admission urine and vitreous fluid; a separate report was received and reviewed. Significant findings are included on the front page of this autopsy report under "Final Diagnoses."

Samples of femoral blood, hospital blood, brain tissue, liver tissue, gastric contents, scalp hair and vitreous fluid are retained.

At the completion of the autopsy, the body was subsequently resealed in its original body bag with security seal #0005692 at 13:15 p.m.

SUMMARY COMMENT

It is my medical opinion that Shannon J. Payne died of complications following an acute acrylfentanyl intoxication, with sudden respiratory depression and arrest, anoxic-ischemic encephalopathy, cardiac arrest, and ultimately death.

Acryfentanyl is a highly potent synthetic opioid which is an analogue of fentanyl. It has a high risk of fatal intoxication, predominantly due to potentially life-threatening respiratory depression.

The manner of death will be certified as accidental, occurring unexpectedly within the setting of substance abuse.

Vincent Tranchida, M.D. 3/2/17

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